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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,454	03/16/2004	Bentley N. Scott	PHDS-31	3253
29106	7590	07/18/2005	EXAMINER	
GROOVER & HOLMES BOX 802889 DALLAS, TX 75380-2889			SOTELO, JESUS D	
			ART UNIT	PAPER NUMBER
			3617	

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/801,454	SCOTT ET AL.	
	Examiner	Art Unit	
	Jesús D. Sotelo	3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-9 are in the application.
2. The new drawings filed 3/11/2005 are acceptable as to content, however, the drawings should include a heading "Replacement Sheet".

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Hunter.

Hunter discloses a hull-mounted anti-fouling system comprising a vessel hull having a fluid network emplaced therein; bubbler outlets (figure 1) mounted in the hull and connected to the fluid network and a controllable source of a non-oxidizing gas (nitrogen) connected to the fluid network.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lund et al in view of Hunter.

Lund et al discloses a marine protection system for preventing or retarding marine growth on vessels. Lund teaches providing an enclosure around a boat hull and bubbling a gas that is toxic to marine growth. Lund teaches that the bubblers can be located a distance from the boat hull or attached to the same. Hunter discloses a similar system used to kill organisms by the introduction of a toxic gas through a system of bubblers. The toxic gas used is nitrogen. In view of these disclosures, it would have been obvious to one having ordinary skill in the art to use nitrogen gas as marine growth inhibitor per the teachings of Hunter. The use of certain materials to kill marine fauna can sometimes affect other marine life. Hunter teaches that studies have shown that nitrogen gas appears to not have such deleterious effects. For this reason, it would have been desirable to one skilled in the art to use nitrogen as the marine growth inhibitor.

7. Claims 1-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunter in view of Lund et al. Hunter discloses a system to kill marine growth within the ballast tanks of ships by the application of a nitrogen gas through a system of bubblers. Lund et al discloses a similar system used for killing marine growth on the outer surfaces of a marine hull through the ejection of a toxic gas by a system of bubblers. In view of these disclosures, it would have been obvious to one having ordinary skill in the art to use the system of Hunt to eliminate marine growth on the outer surfaces of a marine hull through the use of a bubbler system as taught by Lund et al. The use of a system to kill marine growth on the outer surfaces of a hull as taught by Lund et al using a gas as taught by Hunter would have been desirable as an extension of the teachings of Hunter.

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Response to Arguments

8. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jesús D. Sotelo whose telephone number is **571-272-6686**. The examiner can normally be reached on Mon. – Fri. 5:30 AM – 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Samuel J. Morano can be reached on **571-272-6684**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jesús D. Sotelo 7/14/05
Primary Examiner
Art unit 3617
KNX 03D69 ☺

jds
July 14, 2005